## METHODS AND APPARATUS FOR FUEL CONTROL USING INERTIAL MEASUREMENT DATA

## ABSTRACT OF THE DISCLOSURE

Methods and apparatus for fuel control systems using inertial measurement data are disclosed. In one embodiment, a method for controlling a fuel flow includes comparing an acceleration condition of the aircraft with a predetermined threshold at which normal fuel fluid characteristics begin to become unpredictable, and comparing the acceleration condition with a time-based acceleration profile for a given flight profile. Next, the method determines whether the aircraft is about to enter a prolonged negative acceleration regime. The method further includes maintaining normal fuel control and, after a predetermined amount of time has passed, initiating an alternate fuel source to the engine.

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